



City of Aberdeen

Stormwater Management Program (SWMP)

For Calendar Year 2012

Prepared pursuant to the Western Washington Phase II Municipal Stormwater Permit

By

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Section 1 Introduction

1.1 Purpose

This document constitutes the City of Aberdeen 2012 Stormwater Management Program (SWMP) as required under condition S5 of the Western Washington Phase II Municipal stormwater permit (the Permit). The permit requires the creation and implementation of a Stormwater Management Program (SWMP) to address five required program elements and Total Maximum Daily Load (TMDL) requirements when applicable. This SWMP will be attached to the Annual Compliance Report for the Permit for 2012, which is due at Ecology on March 31, 2013.

The goal of the SWMP is to reduce the discharge of pollutants from the City's municipal separate storm sewer system (MS4) to the maximum extent practicable and to protect the water quality of local streams and rivers, which receive stormwater runoff from the MS4.

Together with the City's Comprehensive Stormwater Management Plan, the SWMP is used as an aid in the planning, funding, and implementation of a comprehensive program to address various stormwater issues.

1.2 Background

In 1972, the United States passed the Clean Water Act, which established water quality goals for the surface waters of the United States. Congress amended the CWA in 1987 to address stormwater, which resulted in the creation of the National Pollutant Discharge Elimination System (NPDES) permit program, administered by the Environmental Protection Agency. The agency delegated responsibility to administer the NPDES permit program to most states, including the State of Washington Department of Ecology.

The NPDES was created with the goal of restoring water quality in surface waters (rivers, lakes, streams, bays, etc.) in order to support "beneficial uses" such as fishing and swimming. Permits and compliance codes were created to regulate wastewater or water discharges into surface waters by private and governmental entities. Failure to comply to these regulations may result in fines and other penalties.

The CWA established a two-phase permit program. Phase I focused on large and medium-sized municipalities and counties, construction sites greater than or equal to five acres, and major industrial sources. Phase II, finalized in 2000, applied to "small" municipalities (jurisdictions with population less than 100,000) located within, or partially within, an urbanized area that operate a municipal separate storm sewer system which discharges to a water of Washington state.

1.3 The Western Washington Phase II Municipal Stormwater Permit

Aberdeen has a population of less than 100,000, is in Western Washington, and is an operator of a regulator small MS4. Thus, our Stormwater program must comply with conditions in the Western Washington Phase II Municipal Stormwater Permit. The Permit was issued on February 16th, 2007, and will remain in effect until February 15th, 2012. A Permit allows municipalities to discharge stormwater from municipal systems into "waters of the state" such as rivers, lakes, and streams, as long as we implement programs to reduce pollutants in stormwater to the "maximum extent possible" by conducting programs and activities in the following program areas:

- Public Involvement
- Public Education and Outreach

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- Illicit Discharge Detection and Elimination
- Construction and Post –construction runoff controls
- Pollution Prevention and Municipal Operations and Maintenance
- Monitoring

The SWMP must be prepared and submitted annually and must contain the planned actions and activities that will be used in the following year to gain compliance with the permit. In addition, the Permit requires the City to submit an Annual Compliance Report by March 31st of each year that details actions taken in the previous year to achieve compliance. The full text for the permit is available at: <http://www.aberdeenwa.gov> or can be viewed upon request by contacting the City of Aberdeen at 360-537-3393.

1.4 Implementation Timing

The Permit is valid for 5 years, from February 16th, 2007 to February 15th, 2012, and allows for phased implementation of stormwater management programs and actions. Deadlines for developing and implementing various requirements of the management program are detailed in the actual permit. The Annual Compliance Report for activities conducted in 2011 is due March 31st, 2012. The Western Washington Phase II Municipal Stormwater Permit was reissued without modification for a period of one year for Western Washington, extending the effective date until August 2013.

1.5 City Coordination and Responsibilities

Compliance with the Permit will require coordination and documentation of activities in several City departments. The Public Works Department Surface Water Utility staff will coordinate City efforts, and will meet with staff from other departments regularly to insure that on-going and planned activities meet Permit requirements. It is anticipated that activities required for Permit compliance will be carried out largely by the Public Works, Planning, Parks, City Attorney, and Finance departments. The Fire, Building and Police departments may be involved to a lesser extent.

1.6 The Surface Water Management Utility – Other Activities

This SWMP details activities that are planned and that fall under the purview of the Permit. Stormwater management is one part of the City's overall surface water management strategy. The Surface Water Utility conducts a suite of programs that reduce flooding and protect and improve water quality. Although not directly required, flood reduction efforts can often further stormwater management goals. For details on Surface Water Utility activities not addressed in this SWWP contact the Public Works Department at 360-537-3241.

1.7 The Permit as Document Map

The remainder of this document details the required elements of the SWMP as noted in condition S5C. of the permit, and notes current and planned compliance activities. The subsection of condition S5c. associated with each section is noted in parentheses in the section on Permit Requirements.

Section 2 Public Education and Outreach

This section summarizes the Phase II permit requirements for public education and outreach, describes current activities the City has underway for public education and outreach, and presents activities the City plans to undertake to bring its current program in compliance with the Phase II permit requirements and scheduled efforts through the end of the permit cycle.

2.1 Permit Requirements

Section S5.C.1 of the Phase II permit requires the City to provide an education and outreach program for the area served by its MS4 no later than **February 15, 2009**. The purpose of this program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. The program may target the following audiences and subject areas:

1) For the general public (including homeowners, landscapers and property managers):

- General impacts of stormwater flows into surface waters.
- Impacts from impervious surfaces.
- Source control Best Management Practices (BMPs) and environmentally responsible actions in the areas of pet waste, vehicle maintenance, landscaping and critical area buffers.
- Yard care techniques that protect water quality.
- BMPs for use and storage of pesticides and fertilizers.
- BMPs for carpet cleaning and auto repair and maintenance.
- Stormwater pond maintenance.

2) For businesses (including home-based and mobile businesses):

- BMPs for use and storage of hazardous materials, including (but not limited to) automotive chemicals, hazardous cleaning supplies, and carwash soaps.
- Impacts of illicit discharges and how to report them.

3) For engineers, contractors, developers, and City personnel:

- Technical standards for stormwater site and erosion control plans.
- Well-organized development guidelines.
- Stormwater treatment and flow control BMPs.

The Phase II permit also requires the City to measure the understanding and adoption of targeted behaviors among the targeted audiences. The resulting measurements are to be used to direct education and outreach resources most effectively and evaluate changes in targeted behaviors. Lastly, this section of the Phase II permit requires the City to track and maintain records of public education and outreach activities.

2.2 Current Activities

The City of Aberdeen has focused its education and outreach program inward initially. The responsibility to operate within the restrictions of the phase II permit must be taken seriously by City staff if it is ever to be successful on a broader scale. As the City has moved forward in its education and outreach program we are now more readily able to lead by example. While not neglecting our current emphasis of training within the City ranks are also putting information into the hands of the citizens through newsletters, handouts, and an increased importance on updating the City stormwater website.

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- Training of Street Department maintenance workers on erosion control BMP's and identifying and reporting of illicit discharges.
 - Municipal SWPP DVD – *Rain Check*
 - Good housekeeping & Spill Prevention
 - Spill Control & Response
 - Vehicle Fueling
 - Vehicle & Equipment Maintenance
 - Vehicle & Equipment Washing
 - Materials Management
 - Waste Management
 - Municipal Facility Maintenance
 - Parking Lots & Streets
 - Storm Drain System Cleaning
 - Landscaping & Grounds Maintenance
 - Working Over or Near Surface Waters
 - SWPP for Construction Sites DVD – *Ground Control*
 - Compliance with Stormwater Regulations
 - General BMP Awareness Training
 - Site-Specific BMP Training
 - Timing of Stormwater Training
 - Trainee Evaluations
 - Record Keeping
- Stormwater community research report which created a baseline for community stormwater knowledge
- Training of supervisors and lead men from all Public Works Departments as Certified Erosion & Sediment Control Leads
- Maintained a storm water information booth with handouts for children and adults at the main City event of the year “Splash” which is held on the 4th of July on the river front.
 - Distributed 1567 Stormwater Brochures
 - Distributed 1175 pens with the stormwater logo and spill hotline phone number printed on them.
 - Distributed 315 Frisbees with the stormwater logo and spill hotline phone number printed on them.
 - Distributed 315 re-useable grocery bags with the stormwater logo and spill hotline phone number printed on them.
 - Distributed 315 potato chip bag clips with the stormwater logo and spill hotline phone number printed on them.
 - Distributed 315 water bottles with the stormwater logo and spill hotline phone number printed on them.
 - Catch basin scavenger hunt for children and parents.
- Worked on an ongoing stormdrain catch basin marking program that consisted of Placement of approximately 200 round embossed metal “No Dumping * Drains to River” markers at locations near schools, high pedestrian traffic areas, downtown corridor, and at representative locations throughout the entire City.
- Chehalis River Watershed Festival - Maintained a storm water information booth with handouts for children and adults.
 - Distributed 831 Stormwater Brochures

- Distributed 625 pens with the stormwater logo and spill hotline phone number printed on them.
 - Distributed 165 re-useable grocery bags with the stormwater logo and spill hotline phone number printed on them.
 - Distributed 165 potato chip bag clips with the stormwater logo and spill hotline phone number printed on them.
 - Distributed 165 water bottles with the stormwater logo and spill hotline phone number printed on them.
 - Distributed 165 Frisbees with the stormwater logo and spill hotline phone number printed on them.
 - Catch basin scavenger hunt for children and parents.
- The City Staff discuss policies, procedures, and other stormwater requirements with property owners, developers, contractors, and engineers when they approach the City for building or development permits.

2.3 Planned Activities

In order to continue the City of Aberdeen's compliance with the permit requirements, the following public education and outreach activities are planned for completion in 2012:

- Established a system to document public education outreach activities that are scheduled and completed. (Table 2.2)
- Continuance of the stormwater catch basin marking program placing the remaining 300 catch basin buttons marked with "*No Dumping * Drains To River*"
- Submit a bill stuffer and mail to all utility customers
- Continued annual training of all Public Works Department maintenance workers on erosion control BMP's and identifying and reporting of illicit discharges.
 - Municipal SWPP DVD – *Storm Watch*
 - Municipal SWPP for MS4's DVD – *Rain Check*
 - SWPP for Construction Sites DVD – *Ground Control*
- Semi-annual quarterly mailings of stormwater informational bill stuffers with the utility bills.
- Operation & Maintenance training of all Public Works Department maintenance workers on operational BMP's
 - Topics will include:
 - Operational BMP's.
 - SWPPP training for city maintenance facilities.
 - Housekeeping.
- Fourth of July SPLASH festival - Stormwater informational booth with interaction and handouts for children and adults at the Log Pavilion.
- Chehalis River Watershed Festival - Stormwater informational booth with interaction and handouts for children and adults.
- Update the City of Aberdeen stormwater website to be friendlier to users and have useful stormwater links.

Section 3 Public Involvement and Participation

This section summarizes the Phase II permit requirements for public involvement and participation, describes current activities the City has underway for public involvement and participation, and presents activities the City plans to undertake in the 2012 calendar year to remain compliant with the Phase II permit.

3.1 Permit Requirements

Section S5.C.2 of the Phase II permit requires the City to include ongoing opportunities for public involvement through advisory councils, watershed committees, participation in developing rate structures, stewardship programs, environmental activities, or other similar activities. The City shall develop and implement a process for consideration of public comments on their SWMP. The City is also required to make its SWMP document, annual report, and all other submittals required under the Phase II permit available to the public.

3.2 Current Activities

The City participates in the Grays Harbor Stream Team meetings, where they are available to take comments and suggestions relating to the development and implementation of the SWMP. The public is also encouraged to comment through email on the stormwater website. The following is a partial list of public involvement and participation opportunities that have been provided.

- Numerous presentations have been made to the City council about a variety of stormwater issues. Aberdeen is unique in that the City Council consists of 12 members who are elected from 6 wards throughout the City. Due to size and geographic distribution of our City council it is a much broader representation of the citizens of our community than would be found in a typical city. Also at each council meeting there are representatives from two local radio stations and the local newspaper, as a result whatever is reported to the council is often repeated through the news media to the general population.
- The City of Aberdeen has made the 2011 annual permit and SWMP available to the public on its website, inviting citizens to comment.
- The City of Aberdeen attends regular meetings and partners with The Grays Harbor Stream Team where they are available to discuss the progress and implementation of all stormwater issues within the City of Aberdeen.
- The adoption of ordinances on flood management and all facets of stormwater standards and regulations involve a process requiring a detailed study by a council committee followed by three separate readings of the ordinance, a formal public hearing process, and publishing in the newspaper.

3.3 Planned Activities

Public involvement can promote awareness of and foster a sense of responsibility for the health of the affected watersheds. The City of Aberdeen NPDES Phase II SWMP will include ongoing opportunities for public involvement through some or all of the following forums:

The City plans to stay in compliance with the permit conditions by doing the following:

- Continuing existing public hearing procedures and practices.
- Posting the 2012 SWMP and 2012 Annual Report on the City website after it has been submitted to the Washington State Department of Ecology.

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- Presentation of the current status of the SWMP to the City council as needed.
- Fry Creek Cleanup - Cooperative effort with Grays Harbor Stream Team.
- Solicit comments and suggestions at the outreach activities planned for 2013 stated in the Education & Outreach section above.

Section 4 Illicit Discharge Detection and Elimination

This section summarizes the Phase II permit requirements for illicit discharge detection and elimination (IDDE), describes current activities the City has underway, and presents activities the City plans to undertake to keep its current program in compliance with the Phase II permit requirements and scheduled efforts through the end of the permit cycle.

4.1 Permit Requirements

The City is required by Section S5.C.3 of the permit to implement an ongoing program to detect and remove illicit connections, discharges, and improper disposal, including any spills not under the purview of another responding authority, into the MS4 owned or operated by the City. The goals and requirements of the City's IDDE program are as follows:

Municipal Storm Sewer Map - Geographic Information System (GIS) Mapping

The City has implemented a GIS mapping program to support the IDDE efforts. This GIS effort is intended to identify the City's existing stormwater system and all connections to the City's MS4 that were authorized or allowed by the City after the date of this permit. The City maintains and keeps the map current, and, when requested, provides the information to other municipalities sharing common drainage areas. These maps will include the following information:

- All separate storm sewer outfalls 24 inches or larger including non-pipe outfalls with an equivalent cross-sectional area to all outfalls greater than 24 inches
- Receiving waters
- Structural stormwater BMPS owned or maintained by the City
- Conveyance structures and systems for all required outfalls (indicate type, material, and size where known)
- Associated outfall sub-basin drainage areas
- Land use
- Fully described mapping standards

Ordinances

The City shall prohibit, through ordinances, non-stormwater discharges into the MS4 and implement escalating enforcement procedures and actions. Non-stormwater discharges will prohibit the following categories unless stated conditions in the permit are met:

- Discharges from potable water sources
- Discharges from lawn watering and other irrigation runoff
- De-chlorinated swimming pool discharges
- Street and sidewalk wash water

IDDE Program Goals

The City shall develop and implement an ongoing IDDE Program to detect and address non-stormwater discharges, spills, illicit connections and illegal dumping into the City's MS4 with the following goals:

- Develop procedures for locating priority areas likely to have illicit discharges
- Establish field assessment protocols designed to detect and remove illicit discharges.
- Develop procedures for characterizing discharge and the potential threat from such discharges.

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- Implement procedures for tracing and removing the source of the discharge.
- Develop procedures for IDDE program evaluation and assessment, including tracking inspections, costs associated with the Illicit Discharge Program, and feedback from public education efforts.
- Ensure that public education of the hazards associated with illegal discharges and improper disposal of waste is coordinated with the Public Education component of the Permit Section S5.C.2 and the appropriate information is distributed to target audiences.

Hotline

The City shall establish a hotline or other local number for public reporting of spills and other illicit discharges. A record of all calls received, and the follow-up actions taken, shall to be kept and summarized for the annual report. This hotline number is 360-537-3393.

Training

The City shall provide appropriate training for municipal field staff on the identification and reporting of illicit discharges into MS4s. This portion of the IDDE program will include the following:

- The City shall ensure that all field staff currently responsible for identification, investigation, termination, cleanup, and reporting illicit discharges are currently trained to conduct these activities.
- The City shall implement of an ongoing training program for all municipal field staff that might, as part of their normal job, come into contact with or observe an illicit discharge.
- The City shall document and maintain records of the training provided and the staff trained, and include this information in the annual report.

4.2 Current Activities

The City has taken the following actions to gain compliance with the NPDES phase II with regards to the IDDE program. These include:

- A digital map of the City's stormwater system overlaid on aerial photographs with a corresponding base map has been completed. The completed mapping includes all elements required in the Permit with the exception of mapping private connections to the system. All improvements to the stormwater system are documented and incorporated into the GIS mapping system.
- The City has adopted an ordinance which addresses permit requirements.
- The City has adopted the publication "Guide to Eliminating Illicit Discharges" published by the EPA as its guidelines.
- The City has purchased several DVD training videos for staff as part of the ongoing training aspect of the IDDE program.
- Every catch basin within the City is been cleaned and inspected annually.
- New Aerial photographs have been taken and analysis of impervious areas with the intent of locating priority areas likely to have illicit discharges. Areas identified as having a high probability are visually inspected at a representative location.
- An outfall reconnaissance inventory was conducted on all known outfalls within the City to determine if there was any evidence of an illegal discharge.
- The City has written a SOP for dealing with and illicit discharges.
- The City has developed and implemented a formal reporting and tracking system for illicit discharges reported or identified together with any corrective action taken that follows the SOP for reporting of illicit discharges.

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- The City has adopted and implemented an ongoing annual training protocol for its employees to identify illicit discharges.
- The Stormwater Hotline number has been distributed to the citizens of Aberdeen through Festivals, flyers, mailings, handouts and giveaways such as; Frisbees, reusable grocery bags, flashlights and bag clips. The number is also published to the stormwater website.
- Carwash kits have been purchased for loan to citizens that are conducting car washes.

4.3 Planned Activities

- Continue all current activities.
- Mapping will be updated as changes occur.
- The downtown corridor which consists of mostly impervious areas will continue to be investigated determine the priority areas likely to have illicit discharges.

Section 5 Controlling Runoff from New Development, Redevelopment, and Construction Sites

This section summarizes the Phase II permit requirements for runoff from new development, redevelopment, and construction sites; describes current activities the City has underway; planned activities needed within the permit cycle; and presents activities the City plans to undertake to keep its current program in compliance with the Phase II permit requirements.

5.1 Permit Requirements

Section S5.C.4 of the Phase II permit requires the City to develop, implement, and enforce a program to reduce pollutants in stormwater control runoff to MS4s from new development, redevelopment, and construction site activities. This program must apply to both public and private projects, including roads, and address all site-related pollutant sources. The program must also include the following goals and requirements for all sites larger than 1 acre and smaller site areas that are part of a larger development

- The program shall include an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects with these minimum standards:
 - The minimum requirements, technical thresholds, and definitions in Appendix A of the NPDES Phase II Permit.
 - A site planning process and BMP selection and design criteria that, when used to implement the minimum requirements in Appendix A, will protect water quality and reduce the discharge of pollutants to MEP using AKART prior to discharge. Documentation of this process is required to show how the criteria and requirements will protect water quality, reduce the discharge of pollutants to MEP and satisfy state AKART requirements.
 - Legal authority to inspect private stormwater facilities that discharge to the City's MS4.
 - Provisions to allow for Low Impact Development (LID) techniques, taking into account site conditions, access, and long-term maintenance.
- The City's program shall include a permitting process with plan review and inspection and enforcement capability to meet the above-referenced standards. The program includes:
 - Review of all stormwater site plans required by ordinance
 - Site inspections prior to clearing and construction that have a high potential for sediment transport as determined through plan review
 - Site inspections during construction to ensure temporary erosion and sediment control (TESC) measures are effective
 - Site inspections of permanent stormwater controls and verification that a maintenance plan is completed and responsibility for maintenance is assigned
 - Achieve at least a 95 percent inspection schedule for inspections referenced above
 - An enforcement strategy developed and implemented to respond to issues of noncompliance.
- The City shall provide provisions to verify adequate long-term operation and maintenance of post-construction stormwater facilities and BMPs. These provisions are listed below.
 - Adoption of an ordinance identifying the responsible party for Operation and Maintenance.

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- Establish maintenance standards that comply with the permit expectations for water quality.
- Annual inspections of all stormwater treatment and flow control facilities other than catch basins permitted by the City.
- Inspections of all new flow control and water quality treatment facilities, including catch basins, for new residential developments that are a part of a larger common plan of development every 6 months during the period of heaviest house construction (i.e., 1 to 2 years following subdivision approval) to identify maintenance needs and enforce compliance with maintenance standards.
- The City shall implement procedures for keeping records of inspections and enforcement actions by City staff, including inspection reports, warning letters, notices of violations, and other enforcement records; records of maintenance inspections and maintenance activities shall be maintained as well.
- The City shall make available all copies of the Notice of Intent (NOI) for both Construction and Industrial Activities. The City will continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.
- The City shall verify that all staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct those activities. Training shall be documented and records of the training provided and the staff trained shall be maintained.

5.2 Current Activities

The City currently has a program to reduce pollutants in stormwater runoff from new development, redevelopment, and construction activity. The current program applies to both public and private projects. The current compliance activities associated with the above permit requirements include:

- Stormwater ordinance regulating authority within current permit requirements.
- Spot checks of stormwater facilities after major storm events.
- Staff members have been trained in proper construction erosion control practices.
- The City maintains a minimum of 5 staff members as Certified Erosion and Sediment Control Lead (CESCL)
- The City makes available all copies of the Notice of Intent (NOI) for both construction and industrial activities.
- All stormwater plans are reviewed and approved as part of the building permit or grade and fill process.
 - Stormwater plans from projects disturbing more than one acre are reviewed and inspected by the City prior to the start of construction, when construction is complete and at intervals during the project determined by the Public Works Director.
 - The City conducts inspections of all projects greater than one acre, and all projects of any size that are part of a common plan of development or sale that is greater than one acre. Inspections are conducted by the Deputy Public Works Director, in accordance with the City of Aberdeen Code for Stormwater inspection.
 - The Deputy Public Works Director shall be responsible for all actions regarding inspections and enforcement for all sites that disturb an area greater than one acre or of any size that are part of a common plan of development or sale that is greater than one acre. All records pertaining to the qualifying project shall be kept in the files of the Deputy Public Works Director and shall include the following documents:
 - Permit applications
 - Permit conditions

- Inspections
 - Violations
 - Correspondences
 - Corrective actions
 - Facility maintenance plans documentations
- The City enforces local ordinances controlling runoff from sites through the procedures and provisions stated in the City of Aberdeen Code for Stormwater. The standard operating procedure for enforcement actions is as follows:
 - Upon identifying an out of compliance issue or complaint the inspector can choose to issue a verbal warning or post a written warning at the premises.
 - The issue is to be re-inspected for compliance within 48 hours.
 - If issue persists, inspector should post a stop work order.
 - If work continues without remedy of the issue, the formal legal process should be started in compliance with the established provisions in the City of Aberdeen Code for General Penalty – Civil Violations.
- Due to greatly reduced development within the City, the amount of work required to meet the stormwater plan review and inspection needs has been financed through the general revenue received from building permit fees. The City plans to review its actual costs as it finalizes its own procedures and practices and then develop a fee structure to cover the costs. Based on projected needs and the current development and economic climate, the City doesn't anticipate implementing a fee schedule until 2014.
- Creation of all new development forums to and in the administration of the stormwater requirements

5.3 Planned Activities

The City is now compliant with all of the rules and regulations that have been adopted. There are some standard operating processes that need to be further developed in order to insure consistent compliance with the Permit. In order to maintain compliance with the current permit requirements the City plans to do the following:

- The City will continue all current practices.
- The City will continue to maintain a minimum of 5 staff members as Certified Erosion and Sediment Control Lead (CESCL)
- The City will examine the need to adopt a fee schedule sufficient to fund the permitting, inspection, and enforcement program by 2014.
- The City will enforce local ordinances controlling runoff from sites that are also covered by stormwater permits.

Section 6 Pollution Prevention and Operation and Maintenance for Municipal Operations

This section summarizes the Phase II permit requirements for pollution prevention and operation and maintenance, describes current activities the City has implemented to meet the Phase II requirements, and identifies activities that the City plans to undertake to keep its current program in compliance with the Phase II permit requirements and scheduled efforts through the end of the permit cycle.

6.1 Permit Requirements

Section S5.C.5 of the Phase II permit requires the City to provide a Pollution Prevention and Operation and Maintenance Program for the area served by its MS4. This program is intended to prevent or reduce pollutant runoff from municipal operations and shall include a training component as follows:

- The City shall establish maintenance standards that are as protective, or more protective, of facility function that those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington. The purpose of the maintenance standard is to determine if maintenance is required on a particular facility or structure. If maintenance is deemed necessary during inspection, the following schedule is required for completion of the required maintenance:
 - Within 1 year for wet pool facilities and retention/detention ponds
 - Within 6 months for typical maintenance
 - Within 9 months for maintenance requiring revegetation
 - Within 2 years for maintenance that requires capital construction of less than \$25,000.
- Annual inspection of all municipally owned or operated permanent stormwater treatment and flow control facilities other than catch basins.
- Spot checks of potentially damaged permanent treatment and flow control facilities, other than catch basins after major (greater than 24-hour-10-year recurrence interval rainfall) storm events. If spot checks reveal widespread damage/maintenance needs, inspect all stormwater treatment and flow control facilities that may be affected.
- Inspection of all catch basins and inlets owned or operated by the City at least once within the 5-year permit cycle.
- Inspection of at least 95 percent of all sites where inspection is required, either cyclically or storm-event related, as described above.
- Establishment and implementation of practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads, or highways owned or maintained by the City and road maintenance activities conducted by the City. The following activities shall be addressed:
 - Pipe cleaning
 - Cleaning of culverts that convey stormwater in ditch systems
 - Ditch maintenance
 - Street cleaning
 - Road repair and resurfacing, including pavement grinding
 - Snow and ice control
 - Utility installation
 - Pavement striping maintenance
 - Maintaining roadside areas, including vegetation management
 - Dust control.

- Establishment and implementation of policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the City. These policies shall address, but are not limited to:
 - Application of fertilizer, pesticides, and herbicides, as well as the development of nutrient management and integrated pest management plans
 - Sediment and erosion control
 - Landscape maintenance and vegetation disposal
 - Trash management
 - Building exterior cleaning and maintenance.
- Develop and implement an ongoing training program for employees of the City whose construction, operation or maintenance job functions may affect stormwater quality. Follow-up training shall be provided as needed to address changes in procedures, techniques, or requirements.
- Records of inspections and maintenance or repair activities conducted by the City shall be documented and a summary of actions taken included in the operation and maintenance section of the updated SWMP annual report.

6.2 Current Activities

- The City annually inspects all municipally owned or operated permanent stormwater treatment and flow control facilities for defects that require maintenance.
- Spot checks of potentially damaged permanent treatment and flow control facilities, other than catch basins after major (greater than 24-hour-10-year recurrence interval rainfall) storm events. If spot checks reveal widespread damage/maintenance needs, inspect all stormwater treatment and flow control facilities that may be affected.
- Inspection of all catch basins and inlets owned or operated by the City annually.
- Inspection of at least 95 percent of all sites where inspection is required, either cyclically or storm-event related, as described above.
- Establishment and implementation of practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads, or highways owned or maintained by the City and road maintenance activities conducted by the City through the adherence of developed operation and maintenance standards. The City has developed a pollution prevention and operations maintenance program for the following activities:
 - Ditch Cleaning
 - Dust Control
 - Equipment Repair
 - Gravel Stockpiling
 - Industrial Wash Rack
 - Parking and Storage of Vehicles
 - Pipe Cleaning
 - Roadside Maintenance
 - Road Repair (resurfacing)
 - Snow and Ice Control
 - Storage, Loading and Unloading of Liquids
 - Street Cleaning
 - Utility installation
 - Washing Vehicles

City of Aberdeen Stormwater Management Plan - 2012 Update

- The City has developed and implemented an ongoing training program for employees of the City whose construction, operation or maintenance job functions may affect stormwater quality. Training is conducted quarterly with follow-up training provided as required to address changes in procedures, techniques, and requirements. The following subjects will be covered on an annual basis:
 - Public Works Maintenance Yard SWPPP
 - Vactor Waste Facility SWPPP
 - Charley Creek Dump Site SWPPP
 - Public Works Maintenance Yard BMP's
 - Spill Control Plan
- Records of inspections, maintenance or repair activities conducted by the City shall be documented and included in the operation and maintenance section of the updated SWMP annual report.

6.3 Planned Activities

In Order to keep the City in compliance with the permit requirements the city staff will continue current practices.

Section 7 Stormwater Inundation of the City of Aberdeen

7.1 Permit Requirements and Flood Impacts

While there are no Phase II requirements directly addressing the stormwater flooding issues that face the City of Aberdeen this issue is of paramount importance to the City and does have an impact on stormwater quality. Historically stormwater quality issues created by stormwater flooding in Aberdeen have resulted in infiltration and inflow problems to the sanitary sewer systems which have resulted in sanitary sewer overflows and overloading of the waste water treatment plant in addition to the washing of unwanted debris into the stormwater collection system. For a city over 10,000 people, the City of Aberdeen is the rainiest city in the continental United States and large sections of the City of the community are at certain times below the level of the Pacific Ocean.

Because of these conditions and the substandard storm drainage system the City has until recently experienced the negative impacts of stormwater flooding multiple times per year. As a result, the limited funding for stormwater projects has gone first to address stormwater flooding issues.

7.2 Current Activities

In the last decade the City has made major capital investments in addressing stormwater flooding. Completed projects include construction of 13 stormwater pump station, numerous tidegate improvements, several large detention basins (to store stormwater during high tide periods), diking projects, and many piping and catch basin improvements.

7.3 Planned Activities

The City's major challenge in stormwater flooding prevention will be to maintain the system that has been constructed. Many other small projects will be completed as resources allow.